

REMARKS

Applicant respectfully requests reconsideration of this application in view of the foregoing amendment and following remarks.

Status of the Claims

Claims 16 and 17 are pending in this application, and stand rejected. By this amendment, claims 16 and 17 are amended. No new matter has been added by this amendment.

Objections

The Office Action indicates that claim 17 should depends from claim 16. In response, claim 17 has been amended to correctly depend from claim 16.

Applicant respectfully requests that this objection be withdrawn.

Rejection under 35 U.S.C. §112

Claim 16 has been rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. The Office Action indicates, *inter alia*, that “[t]he Examiner has been unable to find anywhere in the original disclosure reciting that the display displays the RAW data, and that the said RAW data from the display is subsequently stored in one of the areas of memory.” [Page 8 of the Office Action]

In response, in an effort to expedite the prosecution of the instant application, the terms “the third RAW data” in claim 16 have been deleted as suggested by the Examiner.

Reconsideration and withdrawal of the rejection of claim 16 under 35 U.S.C. §112, first paragraph, is respectfully requested.

Rejection under 35 U.S.C. § 103

Claims 16 has been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,963,374 to Nakamura et al. (“Nakamura”) in view of U.S. Patent No.

6,847,388 to Anderson (“Anderson”) and U. S. Patent No. 6,847,388 to Taniguchi et al. (“Taniguchi”). Claim 17 has been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Nakamura in view of Anderson and Taniguchi, and further in view of U.S. Patent No. 6,961,085 to Sasaki (“Sasaki”).

Claim 16 has been amended for further clarification. In particular, amended claim 16 recites, *inter alia*, “the white balance integral processing for the second RAW data by said white balance integration device and the color space conversion for first RAW data by said image processing device processes are performed in parallel during reading of the second RAW data from the image sensing element.” [Emphasis added]

As Applicant understand it, the Examiner at least admits that Nakamura does not explicitly teach that a color conversion operation for the first RAW data is performed in accordance with the start of reading the second RAW data, and the color space conversion for the first RAW data is performed at the same time as the white balance integral processing of the second RAW data. The Examiner further admits that Nakamura does not teach the first and second memory areas of the present invention. It appears that the Examiner relies on Anderson to remedy these missing elements from the primary reference, i.e., Nakamura. [Pages 3-4 of the Office Action] In particular, the Office Action cites several portions of Anderson such as col. 4, line 59 through col. 6, line 3, col. 6, lines 38-56 and col. 8, line 59 through col. 9, line 7 along with Figs. 4A, 4B for the basis of the rejections. [Page 5 of the Office Action]

A portion of the Office Action describes that:

Anderson teaches “Referring again to FIG. 4B, the ping-pong buffers are utilized during live view mode as follows. While input buffer A is filled with image data, the data from input buffer B is processed and transmitted to frame buffer B. At the same time, previously processed data in frame buffer A is output to the LCD screen 402 for display...” As one buffer (i.e., the second area) is filled with raw image data (i.e., the start of reading of the second RAW data from the image sensing element), the other buffer (i.e., the first area) is emptied and processed (i.e., first RAW

data is readout from the first area), which processing involves color space conversion (See 612, figure 7, column 8, line 59 through column 9, line 8). [Page 5 of the Office Action]

It appears that the Examiner equates the operations in Anderson's input buffers and frame buffers as shown in Fig. 4B to the parallel operation of the present invention.

Applicant respectfully disagrees. Applicant notes the relevant portion of amended claim 16 recites that "the white balance integral processing for the second RAW data by said white balance integration device and the color space conversion for first RAW data by said image processing device processes are performed in parallel during reading of the second RAW data from the image sensing element." First of all, there is simply no teaching in Anderson when and how the color conversion and white balance integration operations are performed. Only a portion of Anderson merely describes:

Referring now to FIG. 6, a block diagram is shown of the image file generation process, which begins when the camera is in capture mode and the user presses the shutter button 418 to capture an image. As described above, before the user captures an image in capture mode, frames of raw image data are sequentially captured by the imaging device 114 at a reduced resolution suitable for LCD screen 402, and each of the frame of the raw image data are stored in the ping-pong buffers (FIG. 4B) of an input buffer 538. The live view generation process 612 performs gamma correction and color conversion on the raw image data to convert the data into the YCC format of the LCD screen 402, typically YCC 222 format, and then transfers the YCC 222 data for each frame to the frame buffers 536 for display. The raw image data placed into the input buffers 538 is also processed for extracting exposure, focus, and white balance settings. [Emphasis added, col. 7, lines 6-21]

Other than the above-cited portion which merely describes that the color conversion and white balance settings on the raw image data performed, there is simply nothing in Anderson that teaches that "the white balance integral processing for the second RAW data by said white balance integration device and the color space conversion for first RAW data by said image processing device processes are performed in parallel during reading of the second RAW data from the image sensing element" as specifically required by claim 16. The facts that "while input buffer A is filled with image data, the data from input buffer B is processed and transmitted to frame buffer B" and at the same time, "previously processed data in frame buffer A is output

to the LCD screen 402 for display” in Anderson do NOT necessarily teaches the parallel operation as recited in amended claim 16 discussed above.

Secondly, the Anderson’s so-called ping-pong buffers A, B as shown in Fig. 4B are different from the memory of claim 16. For example, while the memory of claim 16 requires that each of the first and second areas of the memory stores the RAW data from the first and second operations alternately, the input buffers A and B alternate between an input cycle and processing cycle. See, e.g., col. 5, lines 52-53. Continuing portion of Anderson (i.e., col. 5, lines 53-57) further describes that “[d]uring the input cycle, the input buffers 538 are filled with raw image data from the image device 114, and during the processing cycle, CPU 344 processes the raw data and transmits the processed data to the frame buffers 536.”

Each of Taniguchi and Sasaki is cited as disclosing an white balance integration device and a defect correction device, respectively. However, neither Taniguchi nor Sasaki shows or suggests the inventive aspects of amended claim 16 discussed above.

Accordingly, each of claims 16, and 17 in depending from claim 16, is believed patentable over the cited references (i.e., Nakamura, Anderson, Taniguchi and Sasaki), either taken alone or in combination, for at least the reasons discussed above.

Reconsideration and withdrawal of the rejections of claims 16 and 17 under 35 U.S.C. §103(a) is respectfully requested.

Applicant has chosen in the interest of expediting prosecution of this patent application to distinguish the cited documents from the pending claims as set forth above. However, these statements should not be regarded in any way as admissions that the cited documents are, in fact, prior art.

Applicant believe that the application as amended is in condition for allowance and such

action is respectfully requested.

AUTHORIZATION

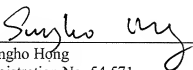
No petitions or additional fees are believed due for this amendment and/or any accompanying submissions. However, to the extent that any additional fees and/or petition is required, including a petition for extension of time, Applicant hereby petitions the Commissioner to grant such petition, and hereby authorizes the Commissioner to charge any additional fees, including any fees which may be required for such petition, or credit any overpayment to Deposit Account No. 13-4500 (Order No. 1232-5191). A DUPLICATE COPY OF THIS SHEET IS ENCLOSED.

An early and favorable examination on the merits is respectfully requested.

Respectfully submitted,
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Dated: December 10, 2008

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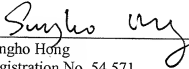
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